

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018117**Date Inspected:** 13-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

OBG # Bay 16 (14W)

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG bottom plate. The weld designations reviewed are as follows:

BP3101-001-001,002 and 003

OBG # TRIAL ASSEMBLY YARD (11DW-11EW)

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection on the U-rib to verify the offset using 1000mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11DW to Segment 11EW – PP 106 to PP 107

OBG # TRIAL ASSEMBLY YARD (11DE-11EE)

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector along with QA inspector Mr.Manjunath S Math performed dimensional joint survey inspection on the U-rib to verify the offset using 1000mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11DE to Segment 11EE – PP 106 to PP 107

OBG # TRIAL ASSEMBLY YARD (11BE-11CE)

This QA Inspector along with QA Inspector Mr. Manjunath S Math performed dimensional joint survey inspection after adjustments on the B3 and B4 work point across transverse splice joints to verify the skin flatness using 5 meter string line, 600mm and 630mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11BE to Segment 11CE (PP 100 to PP 101)

OBG # TRIAL ASSEMBLY YARD (11AW)

This QA Inspector performed a random in process visual inspection of OBG Segment 11AW, this Caltrans Quality Assurance (QA) Inspector observed in bottom panel WT stiffener in which two of the bolt holes edge distance is less than the required minimum edge distance as per the approved shop drawing. Specific details describing this issue are provided below:

- Distance from edge of bolt hole to edge of WT stiffener measured as 13mm (23.5mm from center of bolt hole)
- Minimum required edge distance from edge of bolt hole to edge of WT stiffener for a 19mm diameter bolt is 17mm (27.5mm from center of bolt hole) as per the approved shop drawing.
- The location was at the bottom panel WT stiffener of Segment 11AW at PP96.5 to PP 97.
(From work point W3 towards W4 - 8th WT stiffener)
- Bolt holes were drilled in WT stiffener to install the Cable tray support.
- Bolt holes are 21mm diameter holes for 19mm diameter high strength bolts.
- Segment 11AW is located in the Trial Assembly area.

An incident report was generated for the above issue identified in 11AW bottom panel WT stiffener. See TL-6025 generated on this date for detailed information.

For additional information please reference the pictures below:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (11DE-11EE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 009 in the (4G) overhead position on side panel piece mark no. OBE11C. The location was the transverse splice weld joining segment 11DE and 11EE at bike path side. The welder ID was 067752. The welding variables recorded by QC

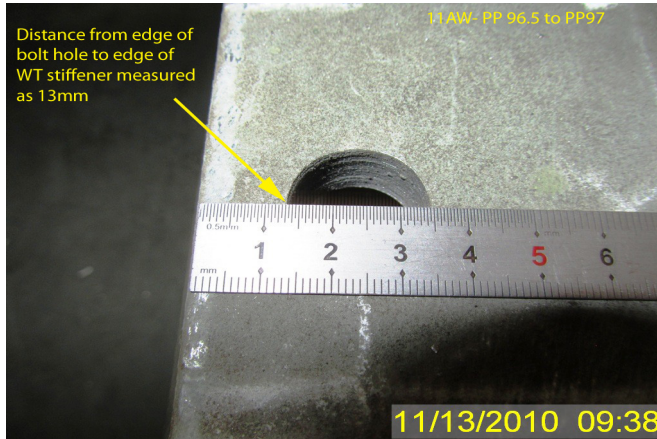
WELDING INSPECTION REPORT

(Continued Page 3 of 3)

appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 008 in the (4G) overhead position on bottom panel piece mark no. OBE11C. The location was the transverse splice weld joining segment 11DE and 11EE. The welder ID was 040320. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Manikandan,Murugan
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Quality Assurance Inspector

Reviewed By:	Peterson,Art
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QA Reviewer
